

LUBRICANT COMPOSITIONS AND METHODS

ABSTRACT OF THE DISCLOSURE

A process for manufacturing a lubricant composition comprises combining a superabsorbent polymer with a material for decreasing friction between surfaces that frictionally engage one another, by polymerizing monomers of the superabsorbent polymer with the material for decreasing friction, or polymerizing the monomers for forming the superabsorbent polymer with the material for decreasing friction and a binder, where the binder is selected from thermoplastic resins or curable resins. The superabsorbent polymer may comprise a polymer of acrylic acid, an acrylic ester, acrylonitrile or acrylamide, including co-polymers thereof or starch graft co-polymers thereof or mixtures thereof. The material for decreasing friction comprises a petroleum lubricant, synthetic lubricant, grease, solid lubricant or metal working lubricant optionally containing a lubricant additive, or mixtures thereof. The process encompasses conducting the polymerization and coating the lubricant composition on a surface such as a wire or cable. The various processes also yield products produced by the process.